



Measurement data monitoring system **testo Saveris™**

Automated and uninterrupted measurement data recording with comprehensive alarm management.

testo Saveris™: Easy, secure and efficient measurement data monitoring

The data monitoring system testo Saveris measures temperature and humidity values in sensitive goods and products, in the surroundings and in processes. The easily operated measurement system provides security as well as savings of time and costs thanks to automated measurement data recording. The measurement data transfer takes place by wireless and/or Ethernet connection to a Base station. This documents and monitors all measurement data. If limit values are exceeded, a number of alarm options such as SMS/e-mail alarm or alarm relay are available. Remote alarms can also be triggered even when the system is not connected to a running PC.

In addition to this, transmitters of all measurement parameters with standard current/voltage interfaces can be integrated into the testo Saveris system. The integration not only of Testo transmitters, but also those of other manufacturers is possible.

All recorded data are centrally stored in a software. At the same time, the testo Saveris software also allows a comprehensive analysis and evaluation of all recorded measurement data.





testo Saveris™ system overview

Data monitoring for uninterrupted control

testo Saveris™ wireless probes

Probe versions with internal as well as external temperature and humidity sensors allow the adaptation to any application. The wireless probes are available optionally with or without display. The current measurement data, the battery status and the quality of the wireless connection are shown.



testo Saveris™ wireless probes

testo Saveris™ Router

The use of a Router can improve or extend the wireless connection in difficult constructional circumstances. Several Routers in the testo Saveris system are of course possible. At the same time, the serial switching if up to 3 Routers V 2.0 provides the highest level of flexibility regarding wireless range.



testo Saveris™ Router

testo Saveris™ Converter

By connecting a testo Saveris Converter to an Ethernet socket, the signal from a wireless probe can be converted into an Ethernet signal. This combines the flexible installation of a wireless probe with the exploitation of the existing Ethernet even over long transmission distances.



testo Saveris™ Converter V 2.0



testo Saveris™ Analog Coupler (wireless)



testo Saveris™ Analog Coupler (Ethernet)

Ethernet



Humidity transmitter

testo Saveris™ Analog Coupler

The two versions of the Analog Coupler (wireless/Ethernet) allow the integration of further measurement parameters into the testo Saveris monitoring system, by including all transmitters with standardized current/voltage interfaces, e.g. 4 to 20 mA or 0 to 10 V.

Humidity and differential pressure transmitters

testo 6651/6681/6351/6381/6383

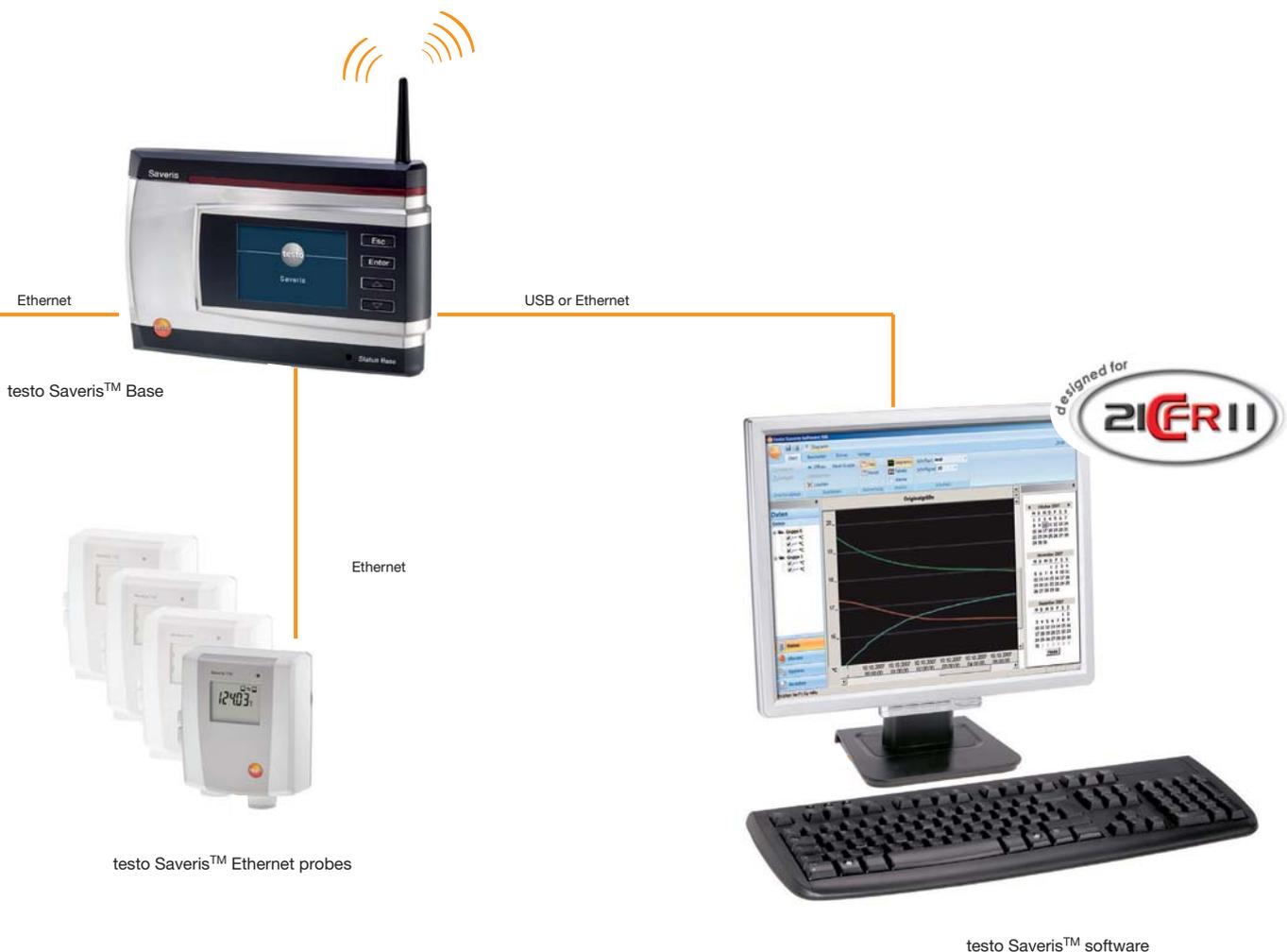
The integration of the humidity and differential pressure transmitters allows control parallel to the measurement data monitoring. This offers the solution for highest accuracy as well as for special applications, (high humidity, trace humidity etc.) in compressed air, drying and air conditioning technology.

testo Saveris™ Base

The Base is the heart of testo Saveris, and can store 40,000 measurement values per measurement channel independently of a PC. This corresponds to a storage capacity of approximately a year at a measurement rate of 15 minutes. System data and alarms are visible via the testo Saveris Base display.

testo Saveris™ software

All temperature and humidity values are collated and documented without interruption here. Depending on requirements, the software is available in three versions: as a basic version SBE (Small Business Edition), as an extended version PROF (Professional), or as a validatable CFR version. Operation is easy thanks to an intuitive user interface. And to round it all off, you can view the measurement data flexibly on various mobile end devices.



testo Saveris™ Ethernet probes

In addition to the wireless probes, probes can be used which can be directly connected to the Ethernet. This means that an existing LAN structure can be used, allowing the data transfer from probe to Base even over large distances.

Overview of application areas for testo Saveris™

Monitoring processes in the pharmaceutical industry

In the pharmaceutical industry, the recording and monitoring of quality parameters is subject to strict requirements. Constant documentation during the production and storage of temperature-sensitive products such as medicines, blood products or cell cultures has long been considered a “must”.

testo Saveris automates central documentation as well as safe monitoring in refrigerated or deep-freeze rooms, incubators and climate cabinets. testo Saveris thus offers optimum control in critical processes.

The comprehensive alarm management allows fast alarms if limit values are exceeded. Thanks to the combination of wireless and/or Ethernet probes, the system concept is ideal for many different applications in the pharmaceutical industry. The data monitoring system testo Saveris of course complies with the requirements of 21 CFR Part 11 and is thus validatable.

Monitoring building climate

Especially in museums and archives, stable ambient conditions are indispensable in the monitoring of building climate, in order to protect sensitive and valuable objects. testo Saveris automates the central recording of all ambient data.

Thanks to the alarms when limit values are exceeded, testo Saveris protects valuable inventory at all times from undesired temperature or humidity influences. The wireless probes can be flexibly installed at the measurement sites without complicated wiring.





Monitoring of processes in research and development, laboratories and hospitals

Research and development areas as well as laboratories and hospitals are responsible for the recording of ambient and process data, in order to monitor sensitive products or machines. testo Saveris takes over the central documentation of the measurement series.

testo Saveris thus guarantees the easy and safe monitoring of ambient and process data in climate cabinets, refrigerators, incubators, test benches or blood banks. At the same time the testo Saveris software also allows a comprehensive analysis and evaluation of all recorded measurement data.

Overview of application areas for testo Saveris™

Monitoring the food cold chain

The maintenance of pre-defined temperature values is crucial for quality in food production, and important for the fulfilment of legal hygiene standards. The deciding factor however, is the uninterrupted maintenance of the cold chain during production and storage. In the final analysis, only this uninterrupted monitoring guarantees an evaluation of the quality and freshness of the products. testo Saveris automates not only the monitoring of the ambient and product temperatures during production but also the maintenance of defined temperature limit values during storage. Alarms are of course immediately triggered when limit values are exceeded.

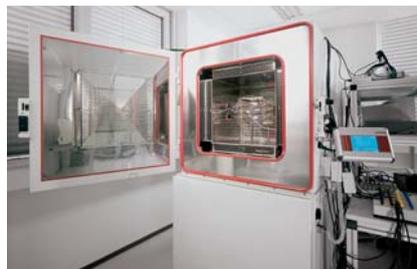
The measurement data are stored centrally in a database, and are available at any time. All measurement values are thus under control! It goes without saying that testo Saveris complies with the EN12830 standard.

Monitoring in production, quality control and storage in industry

A number of quality data must be recorded and monitored in production, quality control and storage in industry. testo Saveris automates the documentation of these data and provides alarms when upper or lower limit values are exceeded. The quality of the products and processes is thus guaranteed at a stable level.

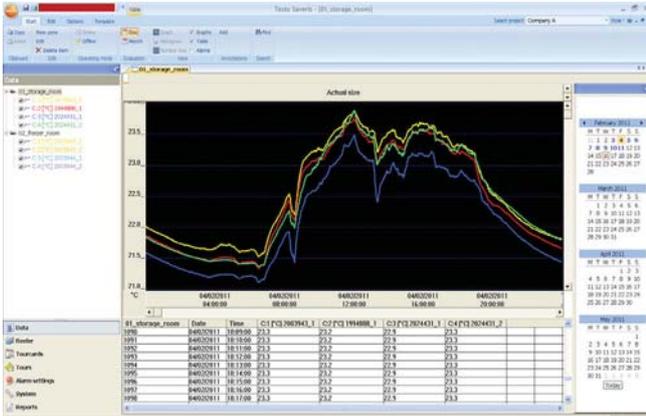
testo Saveris is ideally applicable for the monitoring and documentation of ambient and temperature data in production areas, in storerooms, refrigerators and climate cabinets.

The most diverse applications are optimally covered by testo Saveris wireless and/or Ethernet probes.



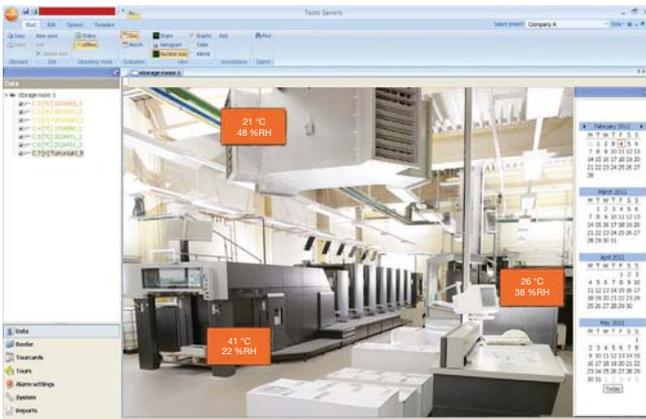


testo Saveris™ software



testo Saveris software SBE (Small Business Edition): Clear information, always up to date, and automatically documented

- The measurement data can be shown as a graph or table at any time.
- Various probes can be compiled into groups. Logical units by measurement task are thus formed.
- The measurement data view over days, weeks or months is freely definable. The integrated calendar offers practical assistance here.
- Form and time of the reporting are predefined once.
- The creation and saving of reports as a PDF file now takes place automatically in accordance with the set conditions. The files are therefore ready to be printed at any time.



testo Saveris software PROF (Professional): Even more flexible with interesting additional functions

- Client-server concept: The measurement data can be monitored by various PCs integrated into the network.
- Photographs of machines or rooms can be saved as images. The respective measurement values are shown directly at the position of the probe in the room or at the machine in these. The link between the location and the measurement value is thus very easily visualized.
- A comprehensive alarm management offers the option of alarming more than two people at the same time or in succession. Depending on the day of the week and/or the time, it is possible to choose whether an alarm is given as an e-mail or an SMS.
- Tour planning with calendar management allows a clear presentation of planned and completed transports.



testo Saveris software CFR: Validatable due to compliance with the requirements of the FDA's 21 CFR Part 11.

- Highest level of data security is guaranteed at all times.
- PDF reports cannot be manipulated.
- User activities are traceable.
- Electronic signatures can render user actions binding.
- Independent certificate of the Fraunhofer IESE is included in the package.

**testo Saveris Web Access:
Flexible measurement data viewing via browser**

- Measurement data can be viewed via the browser of any PC, Smartphone or tablet – without software installation
- Intuitive user interface.
- Easy acknowledgement of alarms.



Installation made easy

- Connect Saveris Base to mains. The probes can now be logged on at the Base: They are switched on in series and automatically identified by the Base.
- The Saveris Base is connected to the PC via USB or Ethernet. The software is installed on the PC with help from the installation wizard.
- The system is ready for configuration: Probe name, limit values, measuring cycles and alarms can be adapted to the individual measuring tasks.

Overview of software functions

	SBE	PROF	CFR
Diagrams/tables/alarm overview/PDF reports	•	•	•
Calendar management	•	•	•
Presentation of probe groups	•	•	•
Alarm dispatch (e-mail, SMS, relay)	•	•	•
Comprehensive alarm management in stationary operation		•	•
Automatic measurement data update		•	•
"Online mode" in stationary operation		•	•
Measurement data on background photo of measurement sites	•		•
Integration in network (client-server)		•	•
Tour planning with calendar management		•	•
Allocation of access rights for stationary and mobile probe groups		•	•
Search function for routes		•	•
Configuration of print text		•	•
Diagrams/tables with identification of start and stop of route		•	•
Audit trail for the traceability of user activities		•	•
21 CFR Part 11 compliant (validatable)			•
Electronic signature			•
Allocation of access rights on three user levels			•

Overview of application areas of testo Saveris software

	SBE	PROF	CFR
Stationary operation	•	•	•
Mobile operation		•	•
Stationary and mobile operation		•	•

Software versions

- testo Saveris SBE software licence 1 user
Part no.: 0572 0180
- testo Saveris PROF software licence 1-5 users
Part no.: 0572 0181
- testo Saveris PROF software licence 1-5 users Classic
Part no.: 0572 0192
- testo Saveris PROF software additional user licence (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))
Part no.: 0572 0190
- testo Saveris PROF software licence + unlimited number of users (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))
Part no.: 0572 9999
- testo Saveris CFR software licence 1-5 users
Part no.: 0572 0182
- testo Saveris CFR software additional user licence (only in connection with the testo Saveris CFR software (order no. 0572 0182))
Part no.: 0572 0193
- testo Saveris CFR software licence + unlimited number of users (only in connection with the testo Saveris CFR software (order no. 0572 0182))
Part no.: 0572 9999
- testo Saveris Web Access
Part no.: 0572 0001
- testo Saveris adjustment software incl. connection cable to wireless and Ethernet probes
Part no.: 0572 0183

testo Saveris™ Base

The Base is the heart of testo Saveris and can save 40,000 readings per measurement channel independently of the PC. The system data and alarms are visible via the display of the testo Saveris Base.

- Display for showing alarms and system data
- Large data memory
- Issue of alarms via LED/relay
- SMS alarm (optional)
- Emergency battery integrated
- Up to 150 probes can be connected
- Connection option via USB or Ethernet



Technical data	
Memory	40,000 values per channel (total max. 18,000,000 values)
Dimensions	225 x 150 x 49 mm
Weight	Approx. 1510 g
Protection class	IP42
Material/Housing	Diecast zinc/plastic
Radio frequency	2,4 GHz
Power supply (absolutely necessary)	6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, power consumption 4 W
Rech. batt.*	Li-ion battery (for data back-up and for emergency SMS if power supply fails)
Oper. temp.	+5 to +45 °C
Storage temp.	-25 to +60 °C
Display	graphical display, 4 control keys
Interfaces	USB, radio, Ethernet
Connectable radio probe	max. 15 probes can be directly connected via wireless interface, max. 150 total via wireless/Router/Converter/Ethernet/Extender, max. 450 channels
Alarm relay	max. 1 A, max. 30 W, max. 60/25 V DC/AC, NC or NO contact
GSM module	850/900/1800/1900 MHz not valid for Japan and South Korea
Set up	Table base and wall bracket included
Firmware version	2.X

*Wearing part

Ordering data			
2,4 GHz	testo Saveris Base, radio frequency 2,4 GHz	2,4 GHz	testo Saveris Base, radio frequency 2,4 GHz, GSM module integrated (for SMS alarm)
	Part no. 0572 0260		Part no. 0572 0261

No mains units or aerials with magnetic base are contained in this ordering data.

Note on the radio frequencies

))) 2.4 GHz: non-EU countries

testo Saveris™ components: Router, Converter and Extender

The use of a Router can improve or extend the wireless connection in difficult constructional circumstances. Several Routers in the testo Saveris system are of course possible. At the same time, the serial switching up to 3 Routers V 2.0 provides the highest level of flexibility regarding wireless range.

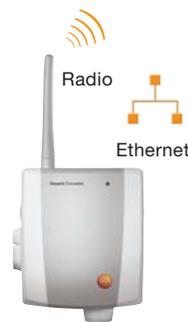
By connecting a testo Saveris Converter to an Ethernet socket, the signal from a wireless probe can be converted into an Ethernet signal. This combines the flexible installation of a wireless probe with the exploitation of the existing Ethernet even over long transmission distances.



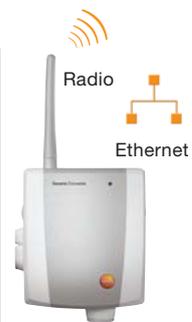
testo Saveris Router V 1.0



testo Saveris Router V 2.0



testo Saveris Converter V 1.0



testo Saveris Converter V 2.0

Application	· for testo Saveris Base Firmware Version V 1.X	· for testo Saveris Base Firmware Version V 2.X	· for testo Saveris Base Firmware Version V 1.X · only for wireless probes Firmware Version 1.X	· for all testo Saveris Base Firmware versions · only for wireless probes with Firmware Version 2.X
Dimensions	Approx. 85 x 100 x 38 mm			
Weight	Approx. 180 g		Approx. 190 g	
Power supply	6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, power consumption < 0.5 W		6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, PoE, power consumption < 2 W	
Oper. temp.	-20 to +50 °C			
Storage temp.	-40 to +60 °C			
Material/Housing	Plastic			
Protection class	IP54			
Interfaces	Radio		Radio, Ethernet	
Connectable radio probe	max. 5		max. 15	
Router cascading	no	yes	-	-
Wall bracket	included			

Versions				
2,4 GHz	testo Saveris Router V1.0, 2.4 GHz, radio transmission medium	testo Saveris Router V2.0, 2.4 GHz, radio transmission medium	testo Saveris Converter V 1.0, 2.4 GHz, converts the radio transmission medium to Ethernet	testo Saveris Converter V 2.0, 2.4 GHz, converts the radio transmission medium to Ethernet
	Part no. 0572 0159	Part no. 0572 0259	Part no. 0572 0158	Part no. 0572 0258

No mains units are contained in this ordering data.

testo Saveris™ components: Radio probes

Probe versions with internal and external temperature sensors and with humidity sensors allow the adaptation to every application. The radio probes are available with or without a display as an option. Current measurement data, the battery status and the quality of the radio link are shown in the display.

testo Saveris T1
Radio probe with internal NTC

°C/°F

testo Saveris T2
Radio probe with external sensor connection and internal NTC, door contact

°C/°F

testo Saveris T3
2-channel radio probe with 2 external TC sensor connections (Choice of TC characteristics)

°C/°F

testo Saveris Pt
Radio probe with 1 external Pt100 sensor connection

	Internal sensor		External sensor	
	Sensor type	Meas. range	Accuracy	Resolution
Internal sensor	NTC	-35 to +50 °C	±0.4 °C (-25 to +50 °C) ±0.8 °C (remaining range)	0.1 °C
External sensor	-	NTC	±0.2 °C (-25 to +70 °C) ±0.4 °C (remaining range)	0.1 °C
	-	TC type K	±0.5 °C or 0.5% of mv	0.1 °C/TC type S 1 °C
	-	TC type J		
	-	TC type T		
	-	TC type S		
	-	Pt100	at +25 °C ±0.1 °C (0 to +60 °C) ±0.2 °C (-100 to +200 °C) ±0.5 °C (remaining range)	0.01 °C
Connection	-	NTC via mini-DIN socket, door contact connection cable included in delivery (1.80 m)	2 TCs via TC socket, max. difference in potential 2 V	1 Pt100 via mini-DIN socket
Dimensions (housing):	80 x 85 x 38 mm			
Weight	Approx. 240 g			
Battery life (Type: 4 AA batteries)	Battery life at +25 °C 3 years; for freezer applications - 3 years with L91 Photo lithium Energizer batteries			
Material/Housing	Plastic			
Protection class	IP68		IP54	
Radio frequency	2.4 GHz			
Measuring rate	Standard 15 min, 1 min to 24 h can be set			
Memory	6,000 measurement values per channel			
Conformity with standards	DIN EN 12830		-	
Oper. temp.	-35 to +50 °C		-20 to +50 °C	
Storage temp.	-40 to +55 °C (incl. batteries)			
Display (optional)	LCD, 2 lines; 7-segment with symbols			
Transmission distance	approx. 100 m w/o obstruction at frequency 2.4 GHz			
Wall bracket	included			

Versions					
2,4 GHz	Version without display	testo Saveris T1 Part no. 0572 1250 *	testo Saveris T2 Part no. 0572 1251 *	testo Saveris T3 Part no. 0572 9252 *	testo Saveris Pt Part no. 0572 7251 *
	Version with display	testo Saveris T1 D Part no. 0572 1260 *	testo Saveris T2 D Part no. 0572 1261 *	testo Saveris T3 D Part no. 0572 9262 *	testo Saveris Pt D Part no. 0572 7261 *

The alkali manganese batteries AA (0515 0414) are included in these ordering data (Analog Coupler excluded). testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

* The testo Saveris Converter V 2.0 (order no. 0572 0258) is required for integration of testo Saveris wireless probes into systems with Base Firmware V 1.X. For more information please contact our customer hotline or your Testo partner.



Radio

		°C/°F and %RH		mA and V	
		%RH NTC external	%RH NTC internal	%RH NTC external	mA V internal
					
	testo Saveris H2D Wireless humidity probe		testo Saveris H3 Wireless humidity probe	testo Saveris H4D Wireless probe with 1 external humidity sensor connection	testo Saveris U1 Wireless probe with current/voltage output

Internal sensor	Probe type	-		NTC	Humidity sensor	-		1 channel: current/voltage input	
	Meas. range	-		-20 to +50 °C	0 to 100 %RH ¹⁾	-		2-wire: 4 to 20 mA, 4-wire: 0/4 to 20 mA, 0 to 1/5/10 V, load: max. 160 Ω at 24 V DC	
	Accuracy	-		±0.5 °C	±3 %RH at +25 °C ±0.03 %RH/K ±1 digit	-		Current ±0.03 mA/0.75 µA Voltage 0 to 1 V ±1.5 mV/39 µV Voltage 0 to 5 V ±7.5 mV/0.17 mV Voltage 0 to 10 V ±15 mV/0.34 mV ±0.02% of. m.v./K deviating from nominal temperature 22 °C	
	Resolution	-		0.1 °C	0.1 °C%/0.1 °C td	-		-	
External sensor	Sensor type	NTC	Humidity sensor	-		NTC	Humidity sensor	-	
	Meas. range (Instrument)	-20 to +50 °C	0 to +100 %RH 1)	-		-20 to +70 °C	0 to +100 %RH ¹⁾	-	
	Accuracy (Instrument)	±0.5 °C	to 90 %RH: ±2 %RH at +25 °C > 90 %RH: ±3 %RH at +25 °C ±0.03 %RH/K ±1 digit	-		±0.2 °C	see probes	-	
	Resolution (Instrument)	0.1 °C	0.1%/0.1 °C td	-		0.1 °C	0.1%/0.1 °C td	-	
Connection	non-exchangeable stump sensor		-		1 x external humidity sensor mini DIN socket		2 or 4-wire current/voltage output Service interface mini DIN for adjustment		
Dimensions (housing):	85 x 100 x 38 mm		80 x 85 x 38 mm		Approx. 85 x 100 x 38 mm		Approx. 240 g		
Weight	Approx. 256 g		Approx. 245 g		Approx. 240 g		Supply: Mains unit 6.3 V DC, 20 to 30 V DC max. 25 V AC		
Battery life (Type: 4 AA batteries)	Battery life at +25 °C 3 years; for freezer applications - 3 years with L91 Photo lithium Energizer batteries								
Material/Housing	Plastic								
Protection class	IP54		IP42		IP54				
Radio frequency	2.4 GHz								
Measuring rate	Standard 15 min, 1 min to 24 h can be set								
Memory	6,000 measurement values per channel								
Oper. temp.	-20 to +50 °C						+5 to +45 °C		
Storage temp.	-40 to +55 °C (incl. batteries)						-25 to +60 °C		
Display (optional)	LCD, 2 lines; 7-segment with symbols						(no display)		
Transmission distance	approx. 100 m w/o obstruction at frequency 2.4 GHz								
Wall bracket	included								

Versions					
2,4 GHz	Version without display	_____	testo Saveris H3 Part no. 0572 6250 *	_____	testo Saveris U1 Part no. 0572 3250 *
	Version with display	testo Saveris H2D Part no. 0572 6262 *	testo Saveris H3 D Part no. 0572 6260 *	testo Saveris H4D Part no. 0572 6264 *	_____

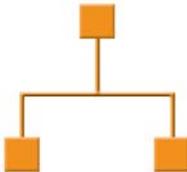
The alkali manganese batteries AA (0515 0414) are included in these ordering data (Analog Coupler excluded). testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately

1) Not for condensing atmosphere. For continuous applications in high humidity (>80 %RH at ≤30 °C for >12 h, >60 %RH at >30 °C for >12h), please contact us via www.testo.com.

* The testo Saveris Converter V 2.0 (order no. 0572 0258) is required for integration of testo Saveris wireless probes into systems with Base Firmware V 1.X. For more information please contact our customer hotline or your Testo partner.

testo Saveris™ components: Ethernet probes

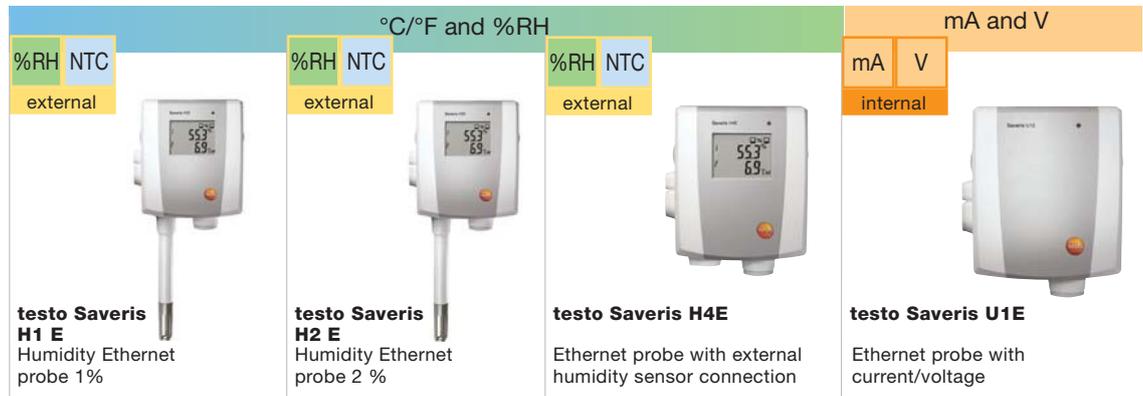
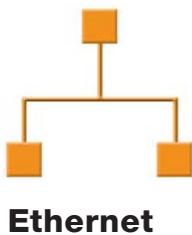
The existing LAN infrastructure can be used through the Ethernet probe. This allows the data transfer from the probe to the Base, even over long distances. Ethernet probes have a display.



Ethernet

°C						
	<div style="border: 1px solid black; padding: 5px; display: inline-block;">NTC external</div> 	<div style="border: 1px solid black; padding: 5px; display: inline-block;">TC external</div> 	<div style="border: 1px solid black; padding: 5px; display: inline-block;">Pt 100 external</div> 			
	<p>testo Saveris T1E</p> <p>Ethernet probe with 1 external sensor connection NTC</p>	<p>testo Saveris T4 E</p> <p>4-channel Ethernet probe with 4 external TC sensor connections</p>	<p>testo Saveris Pt E</p> <p>Ethernet probe with external Pt100 sensor connection</p>			
External sensor	Sensor type	NTC	TC type K	TC type J	Pt100	
	Meas. range (Instrument)	-50 to +150 °C	-195 to +1350 °C	-100 to +750 °C		-200 to +600 °C
	Accuracy (Instrument)	±0.2 °C (-25 to +70 °C) ±0.4 °C (remaining range)	TC type T	TC type S		at +25 °C ±0.1 °C (0 to +60 °C) ±0.2 °C (-100 to +200 °C) ±0.5 °C (remaining range)
	Resolution (Instrument)	0.1 °C	-200 to +400 °C	0 to +1760 °C		0.01 °C
Connection	1 x NTC via mini DIN socket	4 TCs via TC socket, max. difference in potential 50 V		1 Pt100 via mini-DIN socket		
Mini-DIN service interface for adjustment is accessible externally						
Dimensions (housing):	Approx. 85 x 100 x 38 mm					
Weight	Approx. 220 g					
Power	6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, PoE					
Buffer battery	Li-ion (wearing part)					
Material/Housing	Plastic					
Protection class	IP54					
Measuring rate	2 s to 24 h					
Memory	6,000 measurement values per channel					
Oper. temp.	+5 to +45 °C					
Storage temp.	-25 to +60 °C					
Power consumption	PoE Class 0 (typical ≤ 3 W)					
Display (optional)	LCD, 2 lines; 7-segment with symbols					
Wall bracket	included					
Versions	testo Saveris T1E with display	testo Saveris T4 E with display	testo Saveris Pt E with display			
	Part no. 0572 1191	Part no. 0572 9194	Part no. 0572 7191			

testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately. Mains units are not included in delivery.



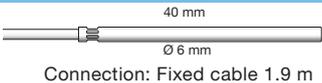
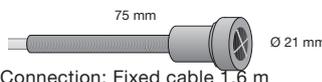
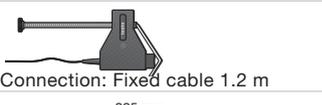
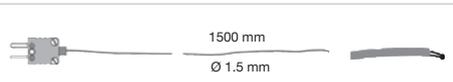
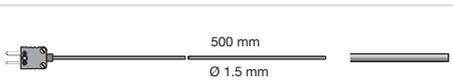
		°C/°F and %RH			mA and V		
		%RH NTC external	%RH NTC external	%RH NTC external	mA V internal		
		testo Saveris H1 E Humidity Ethernet probe 1%	testo Saveris H2 E Humidity Ethernet probe 2%	testo Saveris H4E Ethernet probe with external humidity sensor connection	testo Saveris U1E Ethernet probe with current/voltage		
Internal sensor	Probe type	—	—	—	—	1 channel: current/voltage	
	Meas. range	—	—	—	—	2-wire: 4 to 20 mA, 4-wire: 0/4 to 20 mA, 0 to 1/5/10V, load: max. 160 Ω at 24 V DC	
	Accuracy	—	—	—	—	Current ±0,03 mA/0,75 µA Voltage 0 to 1 V ±1.5 mV/39 µV Voltage 0 to 5 V ±7.5 mV/0,17 mV Voltage 0 to 10 V ±15 mV/0,34 mV ±0.02% of. m.v./K deviating from nominal temperature 22 °C	
External sensor	Sensor type	NTC	Humidity sensor	NTC	Humidity sensor	NTC	Humidity sensor
	Meas. range (Instrument)	-20 to +70 °C	0 to 100 %RH ¹⁾	-20 to +70 °C	0 to 100 %RH ¹⁾	-20 to +70 °C	0 to 100 %RH ¹⁾
	Accuracy (Instrument)	±0.2 °C (0 to +30 °C) ±0.5 °C (remaining range)	to 90 %RH: ±1 %RH +0.7 % of mv at +25 °C > 90 %RH: ±1.4 %RH +0.7 % of mv ±0.03 %RH/K ± 1 digit	±0.5 °C	to 90 %RH: ±2 %RH at +25 °C > 90 %RH: ±3 %RH at +25 °C ±0.03 %RH/K ± 1 digit	±0.2 °C	see external probes
	Resolution (Instrument)	0.1 °C	0.1%/0.1 °C td	0,1 °C	0.1%/0.1 °C td	0,1 °C	0.1%/0.1 °C td
Connection		—			1 x external Ethernet humidity sensor mini DIN socket		1 x 2- or 4-wire current/voltage
Mini-DIN service interface is accessible externally							
Dimensions (housing):		Approx. 85 x 100 x 38 mm					
Weight		Approx. 230 g		Approx. 254 g		Approx. 240 g	
Power		6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, PoE					
Buffer battery		Li-ion (wearing part)					
Material/Housing		Plastic					
Protection class		IP54					
Measuring rate		2 s to 24 h					
Memory		6,000 measurement values per channel					
Oper. temp.		+5 to +45 °C					
Storage temp.		-25 to +60 °C					
Power consumption		PoE Class 0 (typical ≤ 3 W)					
Display (optional)		LCD, 2 lines; 7-segment with symbols				no display	
Wall bracket		included					
Versions	testo Saveris H1 E with display Part no. 0572 6191	testo Saveris H2 E with display Part no. 0572 6192	testo Saveris H4E with display Part no. 0572 6194	testo Saveris U1E no display Part no. 0572 3190			

testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately. Mains units are not included in delivery.
1) Not for condensing atmosphere. For continuous applications in high humidity (>80 %RH at ≤30 °C for >12 h, >60 %RH at >30 °C for >12h), please contact us via www.testo.com.

Sintered caps for testo Saveris H1 E, H2 E and H2 D probes	Part no.
Metal protection cage, Ø 12 mm for humidity probes, for measurement in flow velocities of less than 10 m/s	0554 0755
Stainless steel sintered filter, pore size 100 µm, sensor protection in dusty atmospheres or higher flow velocities, for measurements at higher flow velocities or in contaminated air	0554 0647
Cap with wire mesh filter, Ø 12 mm	0554 0757
Sintered PTFE filter, Ø 12 mm, for corrosive media, High humidity range (long-term measurements), high flow velocities.	0554 0756
Testo saline pots for testing and humidity calibration of humidity sensors, 11.3 %RH and 75.3 %RH, incl. adapter for humidity probes, fast testing or calibration of humidity probe	0554 0660

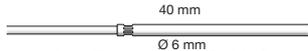
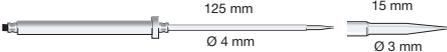
testo Saveris™ accessories: External temperature and humidity probes

Pt 100	Plug-in sensors	Illustration	Measuring range	Accuracy	t ₉₉	Part no.
◆	Robust, Pt100 stainless steel food sensor (IP65)		-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range)	10 s	0609 2272
◆	Penetration sensor Pt100 with ribbon cable, cable length 2 m, IP54		-50 to +180 °C	Class A	35 s	0572 7001
Connection cable for unlimited Pt100 stationary probes (4-wire technology), Cable length: 3 m possible max. cable length: 20 m						0554 0213

TC	Plug-in sensors	Illustration	Measuring range	Accuracy	t ₉₉	Part no.
◆	Stationary sensor with stainless steel sleeve, TC Type K		-50 to +205 °C	Class 2*	20 s	0628 7533
◆	Penetration sensor TC with ribbon cable, Type K, cable length 2 m, IP54		-40 to +220 °C	Class 1	7 s	0572 9001
	Magnetic sensor, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K		-50 to +170 °C	Class 2*	150 s	0602 4792
	Magnetic sensor, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces, TC Type K		-50 to +400 °C	Class 2*		0602 4892
	Pipe wrap sensor for pipe diameter 5 to 65 mm, with exchangeable measuring head. Meas. range short-term up to +280°C, TC Type K		-60 to +130 °C	Class 2*	5 s	0602 4592
	Pipe wrap sensor with velcro strip; for temperature measurement on pipes with diameter up to max. 120 mm; Tmax. +120 °C; TC Type K		-50 to +120 °C	Class 1*	90 s	0628 0020
	Thermocouple with TC adapter, flexible, 800mm long, fibre glass, TC Type K		-50 to +400 °C	Class 2*	5 s	0602 0644
	Thermocouple with TC adapter, flexible, 1500mm long, fibre glass, TC Type K		-50 to +400 °C	Class 2*	5 s	0602 0645
	Thermocouple with TC adapter, flexible, 1500mm long, PTFE, TC Type K		-50 to +250 °C	Class 2*	5 s	0602 0646
	Immersion tip, flexible, TC Type K		-200 to +1000 °C	Class 1*	5 s	0602 5792
	Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters), TC Type K		-200 to +1300 °C	Class 1*	4 s	0602 5693

◆ The specified accuracy class of the testo Saveris radio and Ethernet probe is achieved using these external sensors.

*According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K).

NTC	Plug-in sensors	Illustration	Measuring range	Accuracy	t ₉₉	Part no.
◆	Stub sensor, IP54	 35 mm Ø 3 mm	-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
◆	Stationary sensor with aluminium sleeve, IP65	 40 mm Ø 6 mm Connection: Fixed cable; Cable/length: 2.4 m	-30 to +90 °C	±0.2 °C (0 to +70 °C) ±0.5 °C (remaining range)	190 s	0628 7503*
◆	Accurate imm./pen. sensor, 6m cable, IP67	 40 mm Ø 3 mm Connection: Fixed cable; Cable/length: 6 m	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	5 s	0610 1725*
◆	Accurate immersion/penetration sensor, cable: 1.5 m long, IP67	 40 mm Ø 3 mm Connection: Fixed cable; Cable/length: 1.5 m	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	5 s	0628 0006*
◆	Penetration sensor NTC with ribbon cable, cable length 2 m, IP54	 60 mm Ø 5 mm	-40 to +125 °C	±0.5 % of mv (+100 to +125 °C) ±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)	8 s	0572 1001
	Wall surface temperature sensor, e.g. to prove damage in building material	 30 mm Ø 3.6 mm Connection: Fixed cable; Cable/length: 3 m	-50 to +80 °C	±0.2 °C (0 to +70 °C)	20 s	0628 7507
◆	Stainless steel NTC food sensor (IP65) with PUR cable	 125 mm Ø 4 mm Connection: Fixed cable; Cable/length: 1.6 m	-50 to +150 °C ²⁾	±0.5 % of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211*
	Pipe wrap sensor with Velcro for pipe diameter to max. 75 mm, Tmax. +75°C, NTC	 300 mm Ø 30 mm Connection: Fixed cable; Cable/length: 1.5 m	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)		0613 4611

The standard temperature sensors from the Testo range can be individually tailored to your application. For more information please contact your Testo partner.

%RH	Plug-in sensors	Illustration	Measuring range	Accuracy	Part no.
◆	Humidity/temperature sensor 12mm	 Ø 12 mm	-20 to +70 °C 0 to 100 %RH	±0.3 °C ±2 %RH at +25 °C (2 to 98 %RH) ±0.03 %RH/K ± 1 digit	0572 6172
◆	Humidity/temperature sensor 4 mm	 Ø 4 mm	0 to +40 °C 0 to 100 %RH	±0.3 °C ±2 %RH at +25 °C (2 to 98 %RH) ±0.08 %RH/K ± 1 digit	0572 6174

◆ The specified accuracy class of the testo Saveris radio and Ethernet sensor is achieved using these external sensors.

* Probe tested to EN 12830 for suitability in the transport and storage sectors
2) Long-term measurement range +125°C, short-term +150°C or +140°C (2 minutes)

testo Saveris™: Accessories

Power supply		Part no.
Battery for radio probe (4 AA alkali manganese mignon batteries)		0515 0414
Battery for radio probe for use below -10 °C (4 x Energizer L91 Photo lithium)		0515 0572
Li-ion rechargeable battery for testo Saveris Base, Ethernet probe and testo Saveris Analog Coupler U1E		0515 0021
Mains unit international 100-240 V AC/6.3V DC for mains operation or battery charging in instrument		0554 1096
Power supply (top-hat rail mounting) 90 to 264 VAC/24VDC (2.5 A)		0554 1749
Power supply (desktop) 110 to 240 VAC/ 24VDC (350 mA)		0554 1748
Other features		Part no.
1	Magnetic foot aerial (dualband) with 3 m cable, for Base with GSM module (not suitable for USA, Canada, Chile, Argentina, Mexico)	0554 0524
	Magnetic foot aerial (quadband) for Base with GSM module	0554 0525
2	Alarm module (visual + acoustic), can be connected to Base alarm relay, Ø 70 x 164 mm, 24 V AC/DC/320 mA, perm. light: red, perm. tone: buzzer approx. 2.4 kHz (Mains unit 0554 1749 required)	0572 9999 ID-Nr. 0699 6111/1
3	testo Saveris protective housing for protection from high-pressure cleaning and impact, IP69 K suitable for wireless probes T1/T1D/T2/T2D/Pt/PtD/H4D	0572 0200
	Programming adapter (from mini-DIN to USB) for Base, Ethernet probe, Converter and Extender for the configuration of IP addresses, as well as for the adjustment of testo Saveris probes via testo Saveris adjustment software	0440 6723
Software		Part no.
testo Saveris SBE software licence 1 user		0572 0180
testo Saveris PROF software licence 1-5 users		0572 0181
testo Saveris PROF software licence 1-5 users Classic		0572 0192
testo Saveris PROF software additional user licence (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))		0572 0190
testo Saveris PROF software licence + unlimited number of users (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))		0572 9999
testo Saveris CFR software licence 1-5 users		0572 0182
testo Saveris CFR software additional user licence (only in connection with the testo Saveris CFR software (order no. 0572 0182))		0572 0193
testo Saveris CFR software licence + unlimited number of users (only in connection with the testo Saveris CFR software (order no. 0572 0182))		0572 9999
testo Saveris Web Access		0572 0001
testo Saveris adjustment software incl. connection cable to wireless and Ethernet probes		0572 0183
Calibration Certificates		Part no.
ISO calibration certificate temperature; temperature probes; calibration points -8 °C; 0 °C; +40 °C per channel/instrument (suitable for testo Saveris T1/T2)		0520 0171
ISO calibration certificate temperature; temperature probes; calibration points -18 °C; 0 °C; +60 °C; per channel/instrument (not suitable for testo Saveris T1/T2)		0520 0151
DAkkS calibration certificate temperature; temperature probes; calibration points -20 °C; 0 °C; +60 °C; per channel/instrument (not suitable for testo Saveris T1/T2)		0520 0261
ISO calibration certificate humidity; humidity probe, calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument		0520 0076
DAkkS calibration certificate humidity; humidity probe, calibration points 11.3 %RH and 75.3 %RH at +25 °C; per channel/instrument		0520 0246



Magnetic foot aerial (dualband)



Alarm module (visual + acoustic), can be connected to Base alarm relay



testo Saveris protective housing

Adjustment

Naturally all testo Saveris probes are adjusted in the factory, which is confirmed by an adjustment report. You can perform further calibrations or adjustments either yourself on site, via a service provider or in a calibration laboratory. The separate testo Saveris adjustment software is available for this. After successful adjustment, the current data is stored in the probe. At the same time, the adjustment software and the testo Saveris software accept this data so that the adjustment histories are available.

Radio and Ethernet probes are connected to a cable via the service interface for adjustment.

If you do not wish to perform your own calibration, Testo is available as a service provider.



testo Saveris adjustment software incl. connection cable for wireless and Ethernet probes

Part no. 0572 0183

The essence of precision.

Made in Germany –
on the job for you worldwide.



The requirements for practical measurement solutions are becoming increasingly more complex and customized. At Testo we have made it our business to recognize these customer requirements in industry and trade, and to translate them permanently into new technologies. We carry out our own intensive research, and for decades have been at the cutting edge of the market. Real innovations in sensor systems as well as advances made in microelectronics, measurement data storage or communication with other media such as a PCs and portable terminals benefit all Testo customers.

Competent service

Testo offers professional and reliable consultation for all questions pertaining to measuring technology. We provide users quick assistance also after the purchase is made – worldwide.

Research and development

Testo invests roughly 10 percent of turnover in Research and Development annually. Staff from many different disciplines such as physics, chemistry, biology, electrotechnology and process technology conduct applied research in sensor and measurement technology. Testo maintains international cooperation with universities and research institutes, and is represented in a number of committees which are concerned with innovative measurement technology for various fields.



Certified reliability

Quality assurance allows no leeway. Testo Industrial Services offers certified calibration according to all valid guidelines, as well as the qualification and validation of portable and stationary measurement technology. Testo India offers calibration services at its own accredited high-tech laboratory at Pune.



Worldwide presence

Testo is a manufacturer of measuring instruments and measuring systems with a global presence, with 32 international subsidiaries and representatives in numerous countries. Naturally, Testo also offers you on-site service.

For questions regarding testo Saveris, from installation to retrofitting further system components, please refer to your competent contact in your country.

You can find an overview of the nearest service location at www.testo.com.



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